

Amendments to the Claims:

The following claims will replace all prior versions of the claims in this application (in the unlikely event that no claims follow herein, the previously pending claims will remain):

1. (Currently Amended) A lubricant composition ~~for use in a rotary vane compressor has~~ having a base oil component that comprises an alkylbenzene as a major component thereof and at least 25% by weight of a polyol ester as a minor component thereof, wherein the alkyl benzene component has a molecular distribution in which at least 40% of the molecular weight fraction is greater than 350.
2. (Currently Amended) A lubricant composition according to claim 1 in which the base oil component comprises at least 55% by weight of alkylbenzene and at most 45% by weight of a polyol ester ~~ester, more preferably between 55% and 75% by weight of alkyl benzene and between 45% and 25% by weight of polyol ester and, especially, between 60% and 75% by weight of alkyl benzene and between 45% and 25% by weight of polyol ester.~~
3. (Previously presented) A lubricant composition according to claim 1 in which the base oil component consists essentially of alkylbenzene and polyol ester.
4. (Previously presented) A lubricant composition according to claim 1 in which the alkylbenzene component is selected from the group consisting of mono-alkylbenzenes, di-alkylbenzenes, di-phenylalkanes and mixtures thereof.
5. (Currently Amended) A lubricant composition according to claim 1 in which the alkylbenzene component has a molecular distribution in which at least 80%, ~~and more especially, 100%~~ of the molecular weight fraction is greater than 200; ~~more particularly, at least 75% of the molecular weight fraction is greater than 300;~~ and ~~especially at least 40%, more particularly 50%, of the molecular weight fraction is greater than 350.~~

6. (Currently Amended) A lubricant composition according to claim 1 in which the alkylbenzene component has a molecular distribution in which at least 70% of the molecular weight fraction is below 500, ~~more especially at least 50% of the molecular weight fraction is below 450.~~
7. (Currently Amended) A lubricant composition according to claim 1 in which the alkylbenzene component has a kinematic viscosity of at least 10 cSt, ~~and more preferably at least 25 cSt~~, but not more than 70 cSt at 40°C and a kinematic viscosity of at least 2 cSt, ~~and more preferably at least 3.5 cSt~~, but not more than 10 cSt at 100°C.
8. (Currently Amended) A lubricant composition according to claim 1 in which the alkylbenzene component has a pour point of less than -10°C ~~more preferably less than -20°C and particularly less than -30°C~~.
9. (Previously Presented) A lubricant composition according to claim 1 in which the alkylbenzene component has an acid number of less than 0.04 mgKOH/g.
10. (Previously Presented) A lubricant composition according to claim 1 in which the polyol ester component comprises at least one polyol ester that is a reaction product of a polyhydric alcohol and a monobasic carboxylic acid.
11. (Currently Amended) A lubricant composition according to claim 1 in which the polyol ester component is at least one polyol ester that is a reaction product of one or more alcohols selected from neopentylglycol (NPG), trimethylol-propane (TMP) and pentaerythritol (PE) and dimers and trimers thereof and one or more acids selected from linear and/or branched C₅ to C₁₈ acids, ~~particularly C₅ to C₁₃ acids and more particularly C₅ to C₉ acids.~~
12. (Currently Amended) A lubricant composition according to claim 1 in which the polyol ester component has a kinematic viscosity of at least 5 cSt but not more than 40 cSt ~~and more preferably less than 25 cSt at 40°C and a kinematic~~

viscosity of at least 1.5 cSt but not more than 5 cSt and ~~more~~ ~~preferably~~ ~~less~~ ~~than~~ 4 cSt, at 100°C.

13. (Currently Amended) A lubricant composition according to claim 1 in which the polyol ester component has a pour point of less than -40°C, ~~more~~ ~~preferably~~ ~~less~~ ~~than~~ 50°C and ~~particular~~ ~~ly~~ ~~less~~ ~~than~~ 55°C.

14. (Previously Presented) A lubricant composition according to claim 1 in which the polyol ester component has an acid number of less than 0.04 mgKOH/g.

15. (Currently Amended) A lubricant composition according to claim 1 which has a kinematic viscosity of at least 5 cSt but not more than 40 cSt ~~and~~ ~~more~~ ~~preferably~~ ~~less~~ ~~than~~ 25 cSt at 40°C and a kinematic viscosity of at least 2 cSt but not more than 6 cSt and ~~more~~ ~~preferably~~ ~~less~~ ~~than~~ 5 cSt, at 100°C.

16. (Currently Amended) A lubricant composition according to claim 1 which has a pour point of not more than -40°C, ~~preferably~~ ~~not~~ ~~more~~ ~~than~~ -45°C and ~~especial~~ ~~ly~~ ~~not~~ ~~more~~ ~~than~~ -50°C.

17. (Currently Amended) A lubricant composition according to claim 1 which comprises one or more lubricant additives selected from antioxidants, anti-wear additives, extreme pressure agents, acid scavengers, foaming agents, anti-foaming agents, stabilisers, surfactants, viscosity index improvers, corrosion inhibitors, metal deactivators or passivators, lubricity improvers or oiliness agents and friction modifiers at levels between 0.0001 and 20 weight%, ~~more~~ ~~preferably~~ ~~between~~ 0.01 and 10 weight% ~~more~~ ~~especial~~ ~~ly~~ ~~between~~ 0.01 and 5 weight% based on the weight of the base oil component.

18. (Cancelled).

19. (Currently Amended) A method of lubricating a rotary vane compressor ~~comprises-comprising utilising~~ ~~utilising charging the compressor with~~ a lubricant composition as defined in claim 1.

20. (Previously Presented) A rotary vane compressor charged with a lubricant composition as defined in claim 1.

21. (Previously Presented) A refrigeration system comprising a rotary vane compressor, said system being charged with a refrigerant comprising a chlorine-free, fluorine-containing heat transfer fluid and a lubricant composition as defined in claim 1.

22. (Currently Amended) A refrigeration system according to claim 21 in which the refrigerant is a hydrofluorocarbon. ~~and more preferably is selected from the group comprising difluoromethane (R-32), trifluoromethane (R-23), 1,1,2,2-tetrafluoroethane (R-134), 1,1,1,2-tetrafluoroethane (R-134a), 1,1,1-trifluoroethane (R-143a), 1,1-difluoroethane (R-152a) pentafluoroethane (R-125) and hexafluoroethane (R-116) and mixtures of two or more thereof.~~

23. (Original) A refrigeration system according to claim 22 in which the refrigerant is selected from the group comprising R-32, R-116, R125, R134a, R-143a and mixtures thereof.

24. (Currently Amended) In claim ~~18~~¹⁹, the rotary vane compressor is a fixed-vane compressor.

25. (New) A lubricant composition comprising alkyl benzene and at least 25% by weight polyol ester, wherein the alkyl benzene has a molecular distribution in which at least 50% of the molecular weight fraction is greater than 350.

26. (New) A lubricant composition comprising an alkyl benzene having a molecular distribution in which at least 40% of the molecular weight fraction is

greater than 350 and at least 70% of the molecular weight fraction is below 500.

27. (New) A lubricant composition according to claim 1 in which the base oil component comprises at least between 60% and 75% by weight of alkyl benzene and between 40% and 25% by weight of polyol ester.
28. (New) The lubricant composition according to claim 1 in which the alkylbenzene component has a molecular distribution in which at least 50% of the molecular weight fraction is below 450.
29. (New) The lubricant composition according to claim 1 in which the alkylbenzene component has a kinematic viscosity of at least 25 cSt, but not more than 70 cSt at 40°C and a kinematic viscosity of at least 3.5 cSt, but not more than 10 cSt at 100°C.
30. (New) The lubricant composition according to claim 1 in which the alkylbenzene component has a pour point of less than -30°C.
31. (New) The lubricant composition according to claim 1, wherein the alkyl benzene includes an alkyl component that is branched.
32. (New) The lubricant composition according to claim 1, in which the polyol ester component comprises at least one polyol ester that is a reaction product of a polyhydric alcohol and one or more acids selected from linear and/or branched C₅ to C₉ acids.
33. (New) The lubricant composition according to claim 1, wherein the polyol ester has a kinematic viscosity of at least 5 cSt and no more than 25 cSt at 40 °C, and a kinematic viscosity of at least 1.5 cSt and no more than 4 cSt at 100 ° C.
34. (New) The lubricant composition according to claim 1, wherein the polyol ester component has a pour point of less than -55 °C.

35. (New) The lubricant composition according to claim 1, wherein the composition has a kinematic viscosity of at least 5 cSt and no more than 25 cSt at 40 °C and a kinematic viscosity of at least 2 cSt and no more than 5 cSt at 100 °C.

36. (New) A refrigeration system according to claim 21 in which the refrigerant is selected from the group comprising difluoromethane (R-32), trifluoromethane (R-23), 1,1,2,2-tetrafluoroethane (R-134), 1,1,1,2-tetrafluoroethane (R-134a), 1,1,1-trifluoroethane (R-143a), 1,1-difluoroethane (R-152a) pentafluoroethane (R-125) and hexafluoroethane (R-116) and mixtures of two or more thereof.